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| REVIEW OF NEW SPECIFICATION OR SPECIFICATION CHANGE  | 105-109 |
| **Specification Section No.:** 105 | **Item:** Conformity to the Contract off Portland Cement Concrete Pavement and Dowel Bars and Tie Bars for Joints |
| **Originating Office:** Materials and Geotechnical | **By:** Prieve |
| **Date Sent For Review:** February 3, 2017 | **Date Comments Due: March 3, 2017** |
| Submit response to: STANDARDS AND SPECIFICATIONS UNIT, DIVISION OF PROJECT SUPPORT 4TH FLOOR, CDOT HEADQUARTERS |
| **Vote****/N** | **Concurrent Reviews – Others Commenting** | The attached Draft Specification is submitted for your review and comments. If not returned by Date Comments Due, the draft specification will be considered to be approved unless the Standards and Specifications Unit of the Project Development Branch [(303) 757-9474, (303) 757-9402] is advised otherwise.**REMARKS:** If these proposed changes are approved, our unit will these in a revised version of this standard special provision. |
|  | **Spec Committee Members:** |  **✓** |
|  | Co-Chairman: Lacey |  |
|  | Region 1: Quirk |  |
|  | Region 1: Lucerna |  |
|  | Region 2: Phillips |  |
|  | Region 3: Jean |  |
|  | Region 4: Boespflug |  |
|  | Region 5: Valentinelli |  |
|  | Project Development: Vacant |  |
|  | Specifications: Brinck |  |
|  | Bridge: Hasan |  |
|  | Contracts & Market Analysis: Eddy |  |
|  | Materials: Schiebel |  |
|  | Traffic Engineering: Matthews |  | REVIEWER COMMENTS:( ) Approved ( ) Disapproved ( ) ModifiedIf disapproved or modified, give reason why and show any modifications on the attached draft copy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Name/Signature Date |
|  | Maintenance: Weldon |  |
|  | FHWA: Larson |  |
|  | Attorney General: Milan |  |
|  |  |  |
|  | **Others:** |  |
|  | Colorado Contractors Assoc.: Moody |  |
|  |  |  |
|  | **Technical Committees:** |  |
|  | PDAC |  |
|  | Drainage Advisory Committee (DAC) |  |
|  | Water Quality Advisory Committee (WQAC) |  |

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| **COLORADO DEPARTMENT OF TRANSPORTATION****SUBMITTAL OF NEW SPECIFICATION OR SPECIFICATION CHANGE** | Log No. (Assigned by Standards and Specifications Unit)105-109 |
| TO: Standards and Specifications Unit, Project Development, Suite 290 | FROM:Eric Prieve, MAC(Region, Branch or Technical Committee) |
| SPECIFICATION SECTION NO.105 | ITEM412 | Priority Routine[x]  Fast[ ]  |
| Reason for this new or changed specification:Defines what changes require a process change for concrete paving.Approved at January MAC |
| New or Revised Specification:See attached |
| Note: See Procedural Directive 513.1 for a description of appropriate specification development procedures. |

 **CDOT Form 1215 10/01**

**105.06 Conformity to the Contract of Portland Cement Concrete Pavement.** Conformity to the Contract of all Portland Cement Concrete Pavement, Item 412, will be determined in accordance with the following:

When the Engineer finds that the materials furnished, the work performed, or the finished product does not conform with the Contract, or the Pay Factor (PF) for an element's process is less than 0.75 but that reasonably acceptable work has been produced, the Engineer will determine the extent of the work that will be accepted and remain in place. The Engineer will use a Contract Modification Order to document the justification for allowing the work to remain in place and the price adjustment that will be applied.

When the Engineer finds the materials furnished, work performed, or the finished product is not in conformity with the Contract, or the PF for an element's process is less than 0.75 and has resulted in an inferior or unsatisfactory product, the work or material shall be removed and replaced or otherwise corrected by and at the expense of the Contractor. When the PF for any process is 0.75 or greater, the finished quantity of work represented by the process will be accepted at the calculated pay factor.

Materials will be sampled and tested by the Contractor and the Department in accordance with subsection 106.06 and with procedures contained in the Department's Field Materials Manual. The approximate quantity represented by each sample will be as set forth in subsection 106.06, Tables 106-2 and 106-3. Additional samples may be selected and tested at the Engineer's discretion.

1. Incentive and Disincentive Payments (I/DP) will be made based on a statistical analysis that yields Pay Factors (PF) and Quality Levels (QL). The PF and QL will be made based on test results for the elements of compressive strength and pavement thickness (compressive strength criteria) or the elements of flexural strength and pavement thickness (flexural strength criteria). The Department will indicate in the plans whether compressive strength or flexural strength criteria will be used. If the acceptance criteria is not indicated, flexural strength criteria shall be used.

Incentive or Disincentive payment will not be made for thickness of concrete pavement furnished by the Contractor and placed by others.

When compressive strength criteria is indicated, then the QL will be calculated for the elements of compressive strength and pavement thickness on a process basis. When flexural strength criteria is indicated, then the QL will be calculated for the elements of flexural strength and pavement thickness on a process basis. A process will consist of the test results from a series of random samples. Test results determined to have sampling or testing errors will not be used. All materials produced will be assigned to a process. Changes in mix design, design pavement thickness, or a break of more than 120 working days between placements will create a new process if it affects the element. The following is provided to clarify changes in processes for each element:

1. Construction of mainline pavement, including the shoulders if placed with the mainline, is a single process for the compressive or flexural strength element, when the mix design does not change and there is not a break of more than 120 days between placements.
2. Construction of mainline pavement, including the shoulders if placed with the mainline, is a single process for the thickness element, when the planned thickness does not change and there is not a break of more than 120 days between placements.
3. Construction of ramps, acceleration and deceleration lanes and shoulders placed separately are considered separate processes.
4. Changes in paving equipment, changes in placement method, changes in hauling equipment, adjustments to mix designs that do not require a new mix design, changes in weather conditions, and changes in production rate shall not create a new process in the strength or thickness elements.

The Contractor and Engineer will determine element processes and what distinguishes them as processes during the pre-pave meetings prior to any concrete placement.